

FINDINGS AND RECOMMENDATIONS ON THE ISSUANCE OF AN INCIDENTAL TAKE
PERMIT FOR THE UNIVERSITY OF CALIFORNIA AT SANTA CRUZ RANCH VIEW
TERRACE PROJECT, SANTA CRUZ COUNTY, CALIFORNIA

I. DESCRIPTION OF PROPOSED ACTION

The U.S. Fish and Wildlife Service (Service) proposes to issue an Incidental Take Permit (Permit) to the University of California Regents (UC Regents) under the authority of section 10(a)(1)(B) of the Endangered Species Act of 1973, as amended (Act) for a period of 60 years. Documents used in the preparation of this statement of findings and recommendations include the draft and final University of California at Santa Cruz Ranch View Terrace Habitat Conservation Plan (Jones and Stokes 2004a and b) and the, associated draft and final Environmental Assessments (Service 2004a and b), the Implementing Agreement (Jones and Stokes 2004c), the Cultural Resources Inventory Report (Jones and Stokes 2004d), and the Service's Biological Opinion (Service 2005). All of these documents are incorporated by reference as described in 40 CFR §1508.13.

Under the proposed action and Permit (TE089916-0), the UC Regents would receive take coverage on approximately 38.8 acres for the Ranch View Terrace Housing Project (Project). The majority of the Project will occur within the 25.5-acre Inclusion Area D (IAD), with approximately 13 acres impacted by the housing development and the remaining 12.5 acres as preserve lands. The following activities (Covered Activities) are proposed to occur on the UC Santa Cruz Campus (UCSC): the construction, operation, and occupancy of the Ranch View Terrace 13-acre development on IAD; a 0.2-acre Emergency Response Center (ERC) equipment storage building; and management and monitoring activities on a new permanent 13-acre preserve located within Inclusion Area A (IAA Preserve) and a 12.5-acre preserve located within IAD (IAD Preserve) that will occur over the life of the Permit. The Project would also include a primary loop road and two proposed access road alignments, one to the east of the Project site and one to the north. The Project site would include two proposed utility alignments, one to the south, along the eastern edge of the IAD, and one to the southwest. Portions of the 38.8-acre habitat conservation plan (HCP) boundary are occupied by the federally endangered Ohlone tiger beetle [*Cicindela ohlone* (OTB)] and are used by the federally threatened California red-legged frog [*Rana aurora draytonii* (CRLF)]. The UC Regents plan to offset the expected impacts by implementing avoidance and minimization measures (detailed in chapter 5 of the HCP) and by establishing and managing 25.5 acres of preserve lands for the benefit of the OTB and the CRLF (Plan Species).

Biological Goals and Objectives

The UC Regents have identified specific biological goals and objectives for the Plan Species in the HCP. These biological goals and objectives are meant to minimize any adverse effects of the proposed Project on the Plan Species as well as conserving suitable habitat through the preservation and management of 25.5 acres of preserves. The specific biological goals and objectives are found on pages 1-6 and 1-7 of the HCP.

Monitoring and Reporting

The HCP outlines three types of monitoring that will be implemented: compliance monitoring, effects monitoring, and effectiveness monitoring. Compliance monitoring will be used to verify and document that all requirements as outlined in the Implementing Agreement (IA) and HCP, as well as the terms and conditions of the Permit, are carried out. UCSC staff and Service-authorized biologists will conduct compliance monitoring. Effects monitoring includes monitoring the impacts from the proposed construction activities on the Plan Species. Effectiveness monitoring is designed to evaluate the success of the proposed conservation strategy and the mitigation requirements of the HCP and would include monitoring of the proposed management activities on the IAA and IAD Preserves. A detailed description of the monitoring plan can be found in tables 6-1 and 6-2 and throughout chapter 6 of the HCP.

Annual reports to the Service will document the results of that year's monitoring and surveys, including vegetation and exotic plant monitoring within the preserves, any presence of the Plan Species on the preserves, cumulative accounting of any take of the Plan Species, and avoidance and minimization measures implemented successfully as well as any recommendations for the following year. A more detailed description of the reporting requirements is found on page 6-8 of the HCP.

Adaptive Management

The HCP contains an adaptive management plan that will allow the conservation measures to be adjusted over time if necessary, based on the information gathered during monitoring. If, for example, the success criteria for vegetation management on the preserves are not being met, then management techniques will be adjusted to ensure that success criteria are met. The adaptive management framework is discussed in chapter 6 of the HCP and will be applied to the management of the IAA and IAD Preserves for the benefit of the Plan Species.

Changed and Unforeseen Circumstances

The UC Regents provide measures to address changed and unforeseen circumstances on pages 7-7 to 7-9 of the HCP and in section 11 of the IA. The UC Regents identify the following situations to be considered as changed circumstances: listing of new species, vandalism of the preserves, and natural catastrophic disasters. The UC Regents also describe funding that will be dedicated to addressing changed circumstances, should they occur, in table 7-1 of the HCP.

Pursuant to the "No Surprises" rule (69 *Federal Register* 71723), as codified in 50 CFR, sections 17.22(b) and 17.32(b), the Service will not require additional land, water, or other natural resources without the consent of the UC Regents in the event unforeseen circumstances occur, provided the HCP is being properly implemented. If the Service determines that an unforeseen circumstance has occurred and that additional land, land restrictions, or financial compensation beyond that required under the HCP are needed to conserve the Plan Species, then the UC Regents

will not be obligated to provide the additional measures without their consent. Pursuant to 50 CFR 17.22(b)(8) and 17.32(b)(8), the Service retains the authority to revoke the Permit, in response to an unforeseen circumstance or otherwise, if we find that continuation of the take authorized under the Permit, would appreciably reduce the likelihood of the survival and recovery of a listed species.

Changes between the Draft and Final HCP

The Notice of Availability for the draft HCP was published in the *Federal Register* on July 23, 2004 (69 *FR* 44054). Public comment was solicited through September 21, 2004. The public comment period and associated environmental documents enabled the Service to gather comments from interested parties. The process of reviewing and considering these comments led to the following changes to the original proposed HCP. These changes were clarifications, updates, and additional minimization, mitigation, and monitoring measures. The main substantive changes from the draft to the final HCP are summarized as follows:

1. Figure 2-2 was revised to reflect the construction footprint and phasing.
2. In Figure 2-2, the stormwater drainage system construction location is now specified to be in the southeastern corner of the Project site, adjacent to the housing development.
3. The Project description (page 2-3): was revised to clarify that the number of buildings proposed for construction has not changed (84), however, instead of 80 homes and 4 rentals, there will be 84 homes, no rentals, and no community center.
4. Project Description (page 2-3): the construction footprint has changed from 5.2 to 6.4 acres, the landscape footprint has changed from 7.8 to 6.6 acres, the size of the new homes has changed from 1,600 - 1,900 square feet to 1,750 - 2,080 square feet; however the total number of acres impacted (13 acres) has not changed.
5. Project Description (page 2-3): more detail is provided in the project description to clarify that the 6.6 acres of landscaped grounds will include a neighborhood park and shared amenities such as picnic facilities, playgrounds, and community gardens.
6. Project Description (page 2-3): the proposed road surface has changed from an 8-inch base of crushed rock to a 6-inch base of Class II aggregate.
7. Project Description (page 2-3) and Project Construction (page 2-4): the development will be completed in three phases. Phase I will involve constructing 45 homes, grading of the other 39 plots, establishing the storm water drainage system, and constructing roads.
8. Project Construction (page 2-4): the 39 graded plots will be hydro-seeded with native and non-invasive non-native plants to control erosion.

9. Project Construction (page 2-4): it is estimated that the first phase of construction will take 16 months to complete and the second and third phases will take 7-8 months each to complete.
10. Chapter 4 clarifies that the maximum expected level of take of CRLFs is 60 individuals over a 60-year period by removing the word "annual."
11. Chapter 5 clarifies and adds that the Campus Animal Control Officer or Campus Police will conduct daily patrols of the Ranch View Terrace area to enforce pet restrictions on the IAA and IAD Preserves.
12. A monitoring measure has been added to Table 6-1 regarding standing water on graded sites. On page 6-2, the following sentence was added, "UCSC staff will monitor the graded areas of phases 2 and 3 for standing water."
13. Pre-construction surveys will be conducted before each phase of construction (see page 6-2).
14. The take limit requested for CRLFs in any given year was changed from five to three individuals in table 6-1. The language stating that the "permit ceases" if the take limit of five is exceeded in any one year was changed to, "if take limit (three) is exceeded in any one year, work will stop until coordination with the Service to adjust avoidance and minimization measures is completed."
15. The take limit requested for OTBs that triggers coordination with the Service was changed from five to three individuals in table 6-2. Similar language used for the CRLF, cited above in #14, was used for the OTB.
16. In table 7-1, UCSC will be the entity responsible for designing and installing signs around IAD Preserve and funding these activities. Accordingly, the developer's one time costs were changed from \$29,000 to \$28,000 and the UC Regents' one time costs were changed from \$25,000 to \$26,000.
17. A footnote was added to table 7-1 to clarify that funding for the patrols to monitor recreational use on the IAA Preserve is in addition to UC Regents' annual operating budget to fund patrols on campus.
18. Funding Sources (page 7-2): the HCP will be fully funded in phase 1.
19. Funding Sources (page 7-2): the developer has changed from Ambling West, LLC to Valeo Ranch View Terrace I.L.P.

20. Funding Sources (page 7-2): the second sentence of footnote 12 has been changed to: This rent is recorded in the homeowner's lot lease and is deducted from the homeowner's monthly paycheck, as applicable, or is assessed as a monthly fee.
21. The license agreement with the grazing operator has been added to the HCP as appendix E and the developer responsibilities pursuant to the HCP have been added as appendix F.

II. ANALYSIS OF EFFECTS

The Service has determined that the impacts likely to result to the Plan Species from the proposed action will be minimized and mitigated to the maximum extent practicable by measures described in the HCP, IAA, and the associated Permit. The effects of the proposed action on the Plan Species are fully analyzed in the HCP and the Service's Biological Opinion, which are incorporated by reference, and a summary of the analysis is provided below.

The CRLF, listed in 1996, has been extirpated or nearly extirpated from 70 percent of its former range. Over-harvesting, habitat loss, non-native species introduction, and urban encroachment are the primary factors that have negatively affected the CRLF throughout its range (Jennings and Hayes 1985, Hayes and Jennings 1988).

Impacts to the CRLF are associated with development and occupation of the Ranch View Terrace housing facility, construction and use of the ERC equipment and storage building, and habitat management activities on the IAA and IAD preserves. Project activities will remove a total of 13 acres of marginal upland habitat that may be used by CRLFs for dispersal and shelter. No breeding habitat will be affected. Dispersing CRLFs may be killed or injured by construction activities, however a qualified Service approved biologist is required to conduct preconstruction surveys and relocate any frogs found near work areas, which will minimize any potential impacts to the CRLF. Harm or mortality may result from pedestrians, bikers, cars, or domestic animals during the occupation of the Ranch View Terrace facility, however, the effects will be minimized by education and outreach to residents, and by regular enforcement patrols of the area. Removal of the debris piles stored in the ERC may kill or injure CRLFs seeking refuge in the piles. However, the impacts to CRLFs are expected to be minor due to the poor quality of habitat, only temporary use by the species during dispersal, and that it is very unlikely that CRLFs will seek refuge in the debris piles. CRLFs may be crushed or injured by grazing animals or during other types of habitat management activities on the IAD and IAA Preserves. These impacts will be minimized by allowing grazing and habitat management activities to occur only during the dry season when CRLFs are less likely to occupy the preserves.

The OTB, listed in 2001, is endemic to Santa Cruz County, California. The species has a restricted range where it is known only from coastal terraces supporting remnant patches of native grassland habitat with specific soil types (i.e., Watsonville loam and Bonnydoon soil types). The majority of areas where OTBs occur are threatened by habitat fragmentation, degradation, invasions of nonnative vegetation and destruction due to residential development and recreational activities.

Impacts to OTBs within the Project area are expected to be very low since they have not been observed there and it is not known whether the area is used by the species. Approximately 0.20 acre of suitable, unoccupied OTB habitat will be removed due to the construction of a new utility road along the eastern edge of the IAD Preserve. This could affect the species' ability to colonize this site. OTBs may be accidentally killed, injured, or disturbed by the operation of construction equipment, vegetation clearing, grading, landscaping, or by human activity if they disperse through, or colonize the site. Colonization of the graded areas by OTBs and potential erosion that could result from grading will be minimized by hydroseeding the area with native and noninvasive exotic grasses and forbs.

Habitat management and monitoring activities on the IAA Preserve may adversely affect OTBs. Specifically, OTBs may be accidentally injured or killed by cattle during grazing and by land management staff during monitoring activities on the IAA Preserve detailed in the HCP. The chances of OTBs being disturbed, injured, or killed by cattle grazing are reduced by establishing the grazing period after the OTB activity period.

The conservation strategy of the proposed project will benefit both Plan Species. In addition to minimization measures, 13 acres of CRLF and OTB habitat will be managed and preserved in perpetuity for the benefit of the species. An additional 12.5 acres of habitat will be managed and preserved for 60 years for both species. These mitigation efforts will contribute to the long-term recovery efforts for the Plan Species.

III. PUBLIC COMMENT

The Service has determined that the UCSC Ranch View Terrace HCP qualifies for an environmental assessment (EA) under the National Environmental Policy Act (NEPA), as provided by the Department of the Interior Manual (516 DM 2, Appendix 1 and 516 DM 6, Appendix 1). The EA was made available for public review through the publication of a Notice of Availability of an HCP and receipt of an application for a Permit published in the *Federal Register* on July 23, 2004 (69 *FR* 44054). Publication of the notice initiated a 60-day comment period. The notice and supporting documents were mailed to agencies and private organizations with interest in the proposed action.

The Service received two comment letters in response to the notice for the proposed action during the public comment period. Below is a summary of the comments contained in those letters and our responses:

Comment 1: The commentor requested a discussion of efforts to monitor water quality changes due to increased urban runoff because of concerns over possible impacts to CRLFs.

Response: Since the Project area only contains marginal upland habitat and no water bodies (streams or ponds) are located in the covered area, we do not expect significant impacts to the CRLF from water quality degradation as a result of urban run-off and do not find it necessary to

require water quality monitoring in the HCP. A stormwater drainage system will be located in the northeastern corner of the construction area to reduce any potential impacts of water run-off. The system is designed to have water flow to the south, towards Arroyo Seco and away from the Arboretum pond, hence we do not expect run-off to degrade the water quality of nearby breeding habitat. Although the HCP does not include water quality monitoring, take of CRLFs will be monitored, as described in the HCP.

This issue was also addressed in detail in the final environmental impact report (EIR) for the Project. In order to control potential water quality impacts from the development, sumps will be installed in the catch basins to allow coarse sediment to settle-out during small storms for later removal. Oil-absorbent socks will also be installed on the catch basins and inlets collecting runoff from the roads and parking areas to minimize effects on water quality. Lastly, "T-inlets" will be installed in the catch basins and inlets to prevent oil and grease from being discharged during low-flow conditions. These on- and off-site storm water management features were designed to minimize impacts to downstream resources such as those in the Arroyo Seco watershed (2-6 EA). Based on our analysis in the EA, the Service concluded that possible adverse impacts to the CRLF are expected to be minimized below the level of significance and did not require additional water quality monitoring beyond what was proposed in the EIR. Relevant sections of the final EIR, all of which were approved by the UC Regents, are reprinted below for reference.

Page 4.8-17 of the Final EIR, *Relevant Project Characteristics*:

"While an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) have yet to be prepared, Huitt-Zollars [the drainage consultant] has developed preliminary designs for measures to control potential water quality impacts from development of the Ranch View Terrace Project. Because infiltration of runoff over the portion of the site that is moderately permeable is infeasible due to geotechnical concerns, Huitt-Zollars focused on deploying the same treatment best management practices (BMPs) that have been successfully installed at other locations on the UCSC campus:

- Sumps 12 inches deep in the catch basins, to allow coarse sediment to settle-out during small storms, for later removal;
- Oil-absorbent socks on the catch basins and inlets collecting runoff from roads and parking areas; and
- Modified "T-inlets" in the same catch basins and inlets, to prevent oil and grease from being discharged during low-flow conditions.

Additional water quality improvements would occur in the detention basins. In addition to reducing peak flow rates, the detention basins would be equipped with oil/water separators at their inlets that would be designed to retain 50 gallons of floating petroleum product during a rain storm. This type of feature is designed to be most effective at low flows or for small storms, when runoff concentrations are

highest and potential dilution is lowest. Detention would promote settling of medium to coarse sediments and the turf planted along the basin floor would take up a modest amount of nutrients between storms.”

Pages 4.8-23 to 4.8-24 of the Final EIR, *Potential Impacts and Mitigation Measures*:

“Project specific [Long Range Development Plan] LRDP mitigation measures 4.1-10 state that a SWPPP would be prepared. In addition to erosion and sediment control measures, a SWPPP would typically include project materials management or ‘housekeeping’ measures to avoid construction-phase impacts. With preparation and implementation of a SWPPP, potential impacts of construction-phase pollutants would be minimized to below the level of significance.

A SWPPP also must include post-construction water quality control measures. The Project incorporates the same suite of treatment BMPs that have been successfully installed at other locations on the UCSC campus. Roadway catch basins would be equipped with sediment sumps, oil-absorbent socks and modified “T-inlets” to prevent oil and grease from being discharged during low-flow conditions. The three detention basins, which would be equipped with oil/water separators, would also promote settling of some sediments and a modest amount of nutrient uptake. Implementation of the proposed treatment measures would reduce potential impacts of surface runoff on water quality to below the level of significance. The Project post-construction storm water quality BMPs would be integrated into the campus Stormwater Management Plan, which would identify and formalize routine source control actions and routine monitoring of BMPs.”

Comment 2: The commenter claimed that changes in water quality due to increased urban runoff from the Ranch View Terrace Project could have substantial effects on CRLFs.

Response: The Service does not believe that there will be any substantial effects to the CRLF from runoff of this nature. The Project EA states the following on page 4-12:

“Although the access roads and driveways that would constitute much of the new hardscape area are expected to support comparatively small volumes of traffic...they would nonetheless generate urban runoff with the potential to convey a wide range of urban pollutants. In addition, implementation of the project could result in indirect effects of the project on adjacent watersheds and stormwater drainage patterns. This would affect water bodies located downstream of the project area, including Arroyo Seco and Jordan Gulch, which support sensitive wildlife communities and habitats. However, implementation of the stormwater and groundwater management systems, as discussed in Chapter 2, would minimize the effects of runoff on adjacent watersheds and waterbodies through the installation of infrastructure within both systems that would minimize changes in flow

patterns and water quality. Therefore, the project is not expected to adversely affect adjacent watersheds or water bodies or special-status species that occur in them."

Water quality impacts to potential CRLF breeding sites could have potentially significant effects on the species. However, there is no suitable breeding habitat on the Project site and no recorded occurrences of CRLFs in Arroyo Seco or Jordan Gulch (see figure 3-6b of the HCP). Changes in water quality within the detention basin, if they occur, would not affect the upland habitat on site or the breeding pond in the Arboretum, and are therefore not expected to adversely affect the CRLF.

Comment 3: The commentor advocated restrictions on the use of pesticides and outside lighting on Ranch View Terrace homeowners to minimize cumulative effects on the OTB and CRLF.

Response: Pesticide use is not included as a Covered Activity in the HCP. Despite the fact that pesticide use will not be a Covered Activity, UCSC has committed to using best management practices regarding the application of pesticides and herbicides, limiting their use to landscape areas and not applying more than what is directed by the labeled instructions. A groundskeeper will be responsible for maintaining landscaping and applying pesticides in the common areas. Homeowners will have small areas around their homes they may landscape, however, there will be restrictions on the use of pesticides in those areas. UCSC will provide homeowners with a list of approved methods of landscape maintenance. The small-scale use of pesticides by homeowners according to campus regulations is not expected to adversely affect the Plan Species.

Low-intensity exterior lighting focused away from undeveloped land will be used to minimize the effects of artificial light on wildlife habitat adjacent to the new development. Homeowners would be allowed to install temporary outside lighting, but any permanent installation would require the approval of the Ranch View Terrace Architectural Review Board. This board will incorporate into their guidelines the lighting guidelines for common areas, including those in the HCP. The total area of grassland habitat that could be affected by fugitive light would be small. Since the areas containing artificial light as part of this Project are considered to be marginal upland habitat for CRLF, and are not currently used by OTBs, the use of outdoor lighting is not expected to adversely affect the Plan Species.

Comment 4: The commentor requested that data from Cardiff Terrace on free roaming cats and off-leash dogs be presented, if available.

Response: Free roaming cats are not restricted at Cardiff Terrace and monitoring data is not available. The campus Animal Control Officer has issued citations and warnings for off-leash dogs at Cardiff Terrace in the last three years. All of the citations have been issued to dog owners living outside of Cardiff Terrace. The following incidents were recorded at Cardiff Terrace in the last three years:

- 4 citations and 3 warnings were issued for dogs off-leash (2 of those warnings were for Cardiff Terrace residents);
- 2 citations and 3 warnings were issued for dogs running at large (1 of those warnings was for a Cardiff Terrace resident); and
- 3 stray dogs were impounded while running at large (all belonged to off-campus residents).

Dog owners receiving citations are required to pay a fine. There has been no problem with repeat offenders, so the citations appear to be an effective tool in controlling this problem. No complaints were received about cats in three years, nor were there any incidents involving cats during that time. The Animal Control Officer patrols Cardiff Terrace at least once per day. Patrols will be conducted at minimum once per day at Ranch View Terrace, and citations are expected to be similar in frequency to that at Cardiff Terrace.

Comment 5: The commentor also requested that monitoring for outdoor cats and off-leash dogs be conducted at other residential complexes on campus before pets are allowed on the Project site, or to prohibit pets on site altogether.

Response: This comment is noted, however monitoring outdoor cats and off-leash dogs at other residential complexes is outside the scope of this HCP and may best be addressed directly to UCSC for their consideration in their Long Range Development Plan (LRDP).

Comment 6: The commentor disputed the claim that the cover of native bunchgrasses increased on the coastal prairie mitigation site for the UCSC Music Center. In addition, they are concerned about the difficulty of reintroducing native grasses in coastal California grasslands.

Response: The Service and UCSC management staff would be interested in reviewing the data from the referenced thesis to assist in HCP monitoring efforts. The applicant plans to control weeds and invasives through managing vegetation (e.g., grazing), planting native grasses, monitoring vegetation cover, and employing adaptive management techniques when necessary. In addition, UCSC land management staff will use a vegetation utilization index or residual dry matter index to measure and monitor the diversity and quantity of vegetative cover to manage the habitat appropriately for both Plan Species. The Service believes that these activities will contribute to an increase of native grasses on site.

Comment 7: The commentor asked why no post-construction monitoring for CRLF individuals is proposed in the HCP.

Response: As shown in table 6-1 of the HCP, monitoring will be conducted for CRLFs on the Project site to assess the levels of take resulting from occupancy of Ranch View Terrace. However, no monitoring is proposed for CRLF individuals in the IAA or IAD Preserves. As stated in chapter 4 of the HCP, the effects to CRLFs from the Project are the removal of moderate- to low-quality upland habitat, occasional removal of the debris piles at the ERC site that CRLFs

may use for temporary refuge during dispersal, and low occurrence or risk of take by pedestrians or cars during the occupancy and use of the Project site. The quality of upland habitat for CRLFs in the preserves will be monitored, which is consistent with the habitat-based approach taken in the HCP. The exact extent of use of the IAD Preserve by CRLFs is unknown, but is expected to be low because of the poor quality of upland habitat and because it does not serve as a corridor between two or more breeding ponds. Because we believe that use of these areas by CRLFs will be low, the potential for take of CRLFs will decrease after construction is completed. To be consistent with the habitat-based approach of the HCP, the Service chose not to require monitoring of CRLF individuals in the preserves.

Comment 8: The commentor questioned the adequacy of annual monitoring of the OTB on the IAA Preserve and recommended weekly monitoring of that site during the OTB activity period.

Response: For the past several years, the UC Regents have funded intensive monitoring of the OTB population on the IAA Preserve (see appendix B of the HCP for the results of some of these studies). The results of this monitoring have helped to improve the Service's understanding of the species on campus and throughout its limited range. The UC Regents expect to continue to fund this research because of its benefits to implementation of this and other HCPs, and to other campus planning efforts, including the current update of the LRDP.

The Service and the UC Regents do not believe that intensive (e.g., weekly) monitoring of OTBs on the IAA Preserve is warranted as a condition of the Ranch View Terrace HCP because this level and cost of mitigation is not commensurate with the impacts of the Project. As stated in chapter 4 of the HCP and the EA, impacts to OTBs from the Project are expected to be low. No occupied habitat for OTBs will be removed, and take of OTBs is expected to be minimal as a result of the construction and occupancy of Ranch View Terrace on IAD Preserve. There is greater risk of take due to trail users and habitat management activities on the IAA Preserve, however, we consider the potential for take of the species on the IAA Preserve to be low.

Comment 9: The commentor questioned the adequacy of funding for weed removal in the preserves stated in table 7-1.

Response: Removal of invasive exotic plants within the preserves is described in detail on page 5-10 of the HCP. The UC Regents and the Service believe the proposed funding is adequate because the program is limited to the hand removal of serious invasive weeds such as yellow star-thistle (*Centaurea solstitialis*), poison hemlock (*Conium maculatum*), fennel (*Foeniculum vulgare*), Italian thistle (*Carduus pycnocephalus*), and others, not all "weeds." Currently, the IAA Preserve is free of such weeds, so the cost of control on that site should be relatively small as long as infestations are caught early and livestock grazing continues to be managed properly. Control of most "weeds" on both sites will be accomplished by larger-scale treatments such as livestock grazing or mowing. The IAD Preserve has a weed problem that must be reduced. Initial reduction can be accomplished with a combination of intensive management techniques such as high-

intensity, short-duration livestock grazing, or mowing. After the initial treatments, hand removal may be needed for major weed infestations.

The proposed budget includes time for UCSC staff and a contract biologist on an annual basis. The UC Regents expect that some years will require more effort while others will require less or no effort. The goals of the vegetation program (see tables 6-1 and 6-2 of the HCP) must be met regardless of the budget, so the UCSC maintenance staff is committed to spend more time to achieve these goals, if necessary.

Comment 10: The commentor questioned the adequacy of funding for patrols on the IAA Preserve to monitor recreational use.

Response: The level of effort expended by UCSC patrols will be dictated by the monitoring standard in table 6-2 of the HCP, not the allocated budget. This standard requires patrols at least once every sunny weekend during the OTB activity period. The Service believes this monitoring frequency is adequate to ensure reasonable compliance with the trail restrictions during the OTB activity period. As stated in table 6-2, if violations occur, citations will be issued and the frequency of patrols will increase until violations cease. In addition, the budget amount for patrols allocated by this HCP is in addition to UCSC's annual operating budget for patrols on campus, which include IAA Preserve and IAD Preserve.

Comment 11: The commentor questioned the adequacy of funding for annual reporting to the Service and is concerned this amount will not allow for adequate data analysis.

Response: The reporting budget only accounts for time UCSC staff or their contractor will spend preparing the annual report documenting activities during the previous calendar year. Analysis of monitoring data must occur soon after the data are collected so the results can inform management. The cost of data analysis is included in each monitoring task. If data analysis and interpretation takes more time than anticipated, the contingency fund can be used to offset these costs.

Comment 12: The commentor is concerned that the detention basins for Ranch View Terrace will not function properly, based on a September 2004 Stormwater & Drainage Master Plan by Kennedy-Jenks that stated a University detention basin filled with sediment and debris shortly after construction, and had become habitat for the CRLF. Further, the presence of special status species causes delays in obtaining permits to clean the detention basins. Due to the basins not being routinely cleaned, they stopped functioning in detaining flows.

Response: The HCP states that the stormwater detention basins that will be constructed in Phase 1 of the project will be designed so that hydrologic conditions in the IAD Preserve are maintained. UC Regents will be required to implement this as a condition of their Permit. Since the CRLF is a Plan Species in the HCP, and the stormwater detention basins are within the HCP boundary for the Ranch View Terrace project, they are expected to be maintained and functioning properly, with little effect to the CRLF.

Comment 13: The commentor is concerned that the proposed site for the Early Education and Career Center project will contribute to additional runoff levels and contribute to further degradation of West Moore Creek.

Response: The construction of the Early Education and Career Center is not proposed in this HCP and is not a Covered Activity. The potential location of this center is a considerable distance northwest of the HCP boundary and its construction would likely be addressed in a new HCP if it may result in the take of CRLFs or other listed species. Therefore, this issue is beyond the scope of this HCP.

Comment 14: Concern was expressed that more new development in the campus core is now planned as a result of the new LRDP. This could have increased indirect effects on CRLFs and contribute significant additional runoff to the East Fork of Moore Creek from both the Core West Parking and Physical Sciences Building, as documented in the Stormwater & Drainage Master Plan.

Response: The HCP only addresses the proposed Ranch View Terrace Project located in the IAD Preserve. The concern is noted, but future development as described in the LRDP is beyond the scope of this HCP and would likely be addressed in a new campus-wide HCP.

Comment 15: Concern was expressed that the HCP does not examine issues and implications around implementation of the Stormwater and Drainage Master Plan.

Response: On pages 2-3, 4-4, 4-7, 5-5, and 5-13, the HCP addresses the implementation of a stormwater and drainage system that will maintain the hydrologic conditions in the IAD Preserve.

Comment 16: The commentor asked if the Service had been contacted by, or consulted with, the U.S. Army Corps of Engineers (Corps) regarding a Section 404 permit for the proposed project.

Response: The Service was not contacted by the Corps because none of the components of the Ranch View Terrace Project will result in fill or impacts to jurisdictional wetlands. Therefore, a section 404 permit from the Corps is not required.

Comment 17: Concern was expressed that if the University of California does not sell these homes to its employees, the Developer will be able to sell them to anyone in town, which may contradict what is written in the HCP and affect its funding.

Response: University employees have top priority in the ranked order of Ranch View Terrace homebuyers. The Developer may sell homes to the public only if there are no willing buyers from the University. Provisions for funding in the HCP will be enforced regardless of who buys or rents the homes. The Developer Agreement contains language that stipulates the required funds for implementation of the HCP. To meet Permit issuance criteria, all funding described in an HCP must be assured. The HCP has been revised to clarify that home sales may not be restricted to

University employees and that lot lease fees will either be collected through a monthly deduction in the employee's paycheck or through a monthly charge, based on what is applicable.

Comment 18: Concern was expressed that additional development will be allowed in the IAA Preserve, which serves as mitigation for CRLF, as a result of the UCSC LRDP 2005-2020, which calls for 4.3 million square feet of additional building space.

Response: The Service was informed by UCSC that there is no planned development on the IAA Preserve. Regardless, the mitigation area on IAA Preserve will be protected in perpetuity and managed for the benefit of the Plan Species as described in the HCP.

Comment 19: Concern was expressed that analysis of impacts to the CRLF is restricted to the IAD Preserve and does not address possible consequences to the prime breeding habitat located in the Arboretum pond that may result from increased human activity.

Response: The area where the Arboretum pond is located is outside of the HCP boundary and is therefore beyond the scope of this HCP. Further, it is only speculative that the development at Ranch View Terrace will increase the level of human activity at the Arboretum pond such that it would have adverse effects on the CRLF or its breeding habitat.

Comment 20: Concern was expressed that compost piles covered in rock and plastic, located in the northwest portion of the IAD Preserve and adjacent to the Arboretum, are destructive to OTB and CRLF habitat. The commentor believes that the Service should determine when these practices began. The commentor suggests that UCSC violated Federal law if they implemented these practices without a permit after the Plan Species were listed. It was also suggested that these compost piles are barriers to dispersal for the CRLF, thus making the habitat assessment for the IAD Preserve faulty. The commentor claims that OTBs and CRLFs were spotted in the area before these compost piles were erected.

Response: UCSC will remove the rock piles from the IAD Preserve and use most of the material for the landscape plan. Surveys conducted on the IAD Preserve did not document the presence of OTBs or CRLF. We have assumed their potential presence and use of the site due to documented presence in nearby areas and the occurrence of potential habitat. Based on the information provided, the Service cannot confirm that take has occurred, and therefore does not believe that UCSC has violated the Act.

Comment 21: The commentor questioned how UCSC could develop and apply for a reliable HCP without having done any CRLF studies. The commentor also questioned how the Service can approve an HCP without requiring such studies to be completed.

Response: CRLF and OTB studies were completed for Inclusion Areas A and D. However, section 4 (b) of the Act requires that the "Secretary shall make all determinations solely on the basis of the best scientific and commercial data available..." Therefore, permit applicants are not

required to conduct species surveys during their HCP formulation, and the Service determines whether to issue a permit based on the best scientific information available during the time the application and HCP is processed.

IV. INCIDENTAL TAKE PERMIT CRITERIA – ANALYSIS AND FINDINGS

Section 10(a)(2)(A) of the Act specifically mandates that "no permit may be issued by the Secretary authorizing any taking referred to in paragraph (1)(B) unless the applicant therefore submits to the Secretary a conservation plan that specifies--(i) the impact which will likely result from such taking; (ii) what steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps; (iii) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and (iv) such other measures as the Secretary may require as being necessary or appropriate for the purposes of the plan."

Section 10(a)(2)(B) of the Act mandates that the Secretary shall issue a permit if he finds "...after opportunity for public comment, with respect to a permit application and the related conservation plan that---(i) the taking will be incidental; (ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; (iii) the applicant will assure that adequate funding for the plan will be provided; (iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and (v) the measures, if any, required under subparagraph (A)(iv) will be met; and he has received such other assurances as he may require that the plan will be implemented..."

With regard to this specific Project, Permit action, and section 10(a)(2)(B) requirements the Service makes the following findings:

1 The taking will be incidental

The take of Plan Species within the Project area will be incidental to the otherwise lawful construction and use of faculty housing, associated roads, and equipment storage, as well as management activities on the IAA and IAD Preserves, and not the purpose of, these lawful activities. The UC Regents are not required to seek an Permit from the State and have complied with all other State requirements. The Final EIR for this Project was finalized in June 2004.

2. The permittee will, to the maximum extent practicable, minimize and mitigate the impacts of taking listed species.

The Service finds that the HCP minimizes and mitigates the impacts of take of OTBs and CRLFs from the Ranch View housing development, as well as the management activities anticipated to occur on the preserves, to the maximum extent practicable in light of the low level of impacts anticipated to occur to the Plan Species from the Covered Activities. The HCP also represents the most practicable alternative to minimize and mitigate the impacts to the Plan Species. Under the

provisions of the HCP, the impacts of take will be minimized, mitigated, and monitored through the following measures:

1) conducting preconstruction surveys; 2) installing fencing around the perimeter of the construction site to minimize disturbance to upland habitat; 3) training and education of construction superintendents by approved biologists; 4) surveying of any standing water of 4 inches or more in depth at the construction site for CRLFs; 5) prohibiting construction of habitat attractants for CRLFs, such as ornamental ponds or other standing water areas; 6) managing trash to reduce the attraction of predators; 7) focusing low-intensity exterior lighting; 8) restricting domestic cats from outdoor areas and requiring dogs to be leashed at all times while outdoors; 9) distributing informational pamphlets on Plan Species to all new residents; 10) implementing regular patrols by enforcement personnel; 11) restricting the use of pesticides; 12) managing and preserving 13 acres in perpetuity on the IAA Preserve for the benefit of the Plan Species; 13) managing and preserving 12.5 acres on IAD Preserve for the Plan Species for the permit term of 60 years; and 14) compliance, effects, and effectiveness monitoring. Chapter 5 of the HCP describes the minimization measures proposed by the UC Regents in full detail. Chapter 6 provides a detailed description of the monitoring plan.

To make the finding that the conservation measures proposed by the UC Regents minimize and mitigate the taking of the Plan Species to the maximum extent practicable, the Service must evaluate whether the proposed conservation measures are commensurate with the level of take anticipated. The impacts to the Plan Species associated with the Ranch View Terrace Project are expected to be extremely low. Currently the OTB does not occupy any of the development area and only 0.2 acres of potential but unoccupied habitat will be removed within the Covered Area. The CRLF has not been observed on the Project site and the area contains very marginal dispersal habitat for the CRLF. Although the Plan Species may be affected by restoration, enhancement, and management of the IAA and IAD Preserves, preserving and managing 25.5 acres for the benefit of the Plan Species more than offsets any short term impacts. The Service believes the conservation measures effectively compensate for the level of take and therefore we find the HCP minimizes and mitigates the effects of the taking of the Plan Species to the maximum extent practicable.

Several alternatives to the proposed Project were also considered by the Service. The alternatives are the following: (1) No Action; (2) Off-Campus Housing; and (3) Reduced Project.

Under the No Action Alternative, the Project would not go forward and the Permit would not be issued. In either scenario, failure to implement the Project would avoid all potential Project-related impacts on the Plan Species, including the potential for take. However, this alternative was rejected because it did not meet the development goals of the applicant and in addition, the Plan Species would not benefit from the conservation and management of 25.5 acres of preserves.

The Off-Campus Housing Alternative would entail the UC Regents subsidizing off-campus housing for staff. Although this alternative would result in fewer impacts to the Plan Species than would result from construction and occupation of the housing project, there would not be 25.5 acres of reserves managed for the long term benefit of the Plan Species. In addition, the UC Regents could not sustain this alternative for a long period of time and would therefore not meet the goals and objectives of the applicant. The Service determined that the proposed Project would provide a greater conservation benefit to the Plan Species than the Off-Campus Housing Alternative.

The Reduced Project Alternative would reduce the amount of ground disturbance at the Project site, and the number of living units, it would not reduce the likelihood of take of the Plan Species during occupancy and it would not meet the applicants objective of providing sufficient affordable housing on campus. The Service determined that this alternative would not provide substantial benefits to the Plan Species compared to the proposed Project.

Therefore, the Service finds that the proposed Project minimizes and mitigates the impacts of the taking to the maximum extent practicable because it provides more conservation benefits for the Plan Species than the other alternatives, while meeting the needs of the UC Regents.

3. The Permittee will ensure that adequate funding for the HCP and procedures to deal with unforeseen circumstances will be provided.

The costs associated with the HCP are estimated to be \$54,000 in one-time costs and \$20,900 in annual costs for the duration of the Permit. These costs will be fully funded by the completion of phase 1 of the Project. The UC Regents will invest the funds generated from the one-time fees on all house units sold. These funds will be held in escrow until the conclusion of all sales and then invested into the University's general endowment pool. The developer, Valeo Ranch View Terrace I.L.P., is responsible for all conservation measure costs associated with construction, totaling approximately \$28,000. The UC Regents will pay the remaining costs, including annual costs, funds for changed circumstances, and one time costs associated with a 5-year livestock grazing study. The estimated endowment amount required is \$480,500, which includes a 10 percent annual contingency. Should funds in the account be insufficient in any one year, UC Regents will dedicate additional funds from a lot lease account or other sources to make up the difference. The lot lease account is a monthly rent payable by the homeowner to the University for 60 years and will increase over time to account for increased costs in operations and maintenance. The Service believes that the endowment and the lot lease account, if necessary, will be sufficient to meet the costs associated with the HCP.

In the event of suspension or revocation, the UC Regent's obligations under the HCP would continue to the extent that the Service determines that take of Plan Species occurred under the Permit but was not fully mitigated in accordance with the HCP. In such an event, mitigation measures would be implemented until the take has been mitigated to the maximum extent practicable.

Pursuant to the Service's "No Surprises" regulations [50 CFR 17.22(b)(5) and 17.32(b)(5)], the HCP includes procedures to deal with unforeseen circumstances. In the event of unforeseen circumstances affecting the Plan Species, the UC Regents would not be required to provide the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the level otherwise agreed upon for the species covered by the HCP without their consent; provided that proper implementation of the HCP has occurred.

Consistent with the "No Surprises" rule, the HCP also identifies changed circumstances that can reasonably be anticipated and describes the responses to such changes that will be carried out by the UC Regents. The UC Regents have identified and provided a means to address the following changed circumstances: (1) listing of a new species not covered in the HCP; (2) vandalism of the preserves; and (3) natural catastrophic events that are known to occur regularly in the area, including fire, severe water erosion, extended drought, and landslides. If the Service lists a species not covered in the HCP during the Permit term, and if the Project may result in take of that species, the HCP and the Permit will be reevaluated. The Covered Activities in the HCP may be modified, as necessary, to ensure that the activities covered under the HCP are not likely to jeopardize, or result in the take of, the newly listed species, or adversely modify any newly designated critical habitat. If implementing the requirements of this HCP would result in take of the newly listed species, the HCP would need to be modified and the permit amended, or the UC Regents would need to apply for a new permit. If the preserves are disturbed through acts of vandalism (e.g., removal of fencing, signage, or use of unauthorized vehicles), UCSC staff will assess the extent of the damage, implement measures to repair the damage, and minimize future vandalism. Measures may include repair or redesign of fencing and signage, more frequent monitoring to assess natural regeneration, or active revegetation of native species to accelerate regeneration. If natural catastrophic events occur, UCSC will engage a Service-approved biologist, as appropriate, to assess the extent of the damage from the natural disaster and determine whether remedial measures are warranted. UCSC will implement measures such as soil stabilization, natural regeneration monitoring, or active revegetation of native plants, as necessary. UCSC will determine whether remedial measures are warranted and which measures to implement in consultation with, and with the approval of, the Service.

4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.

The Act's legislative history establishes the intent of Congress that this issuance criterion is identical to a finding of "not likely to jeopardize" under section 7(a)(2) (see 50 CFR 402.02). As a result, approval of the UC Regent's permit application has also been reviewed by the Service under section 7 of the Act. The biological opinion concluded that the approval of the UC Regent's permit application is not likely to jeopardize the continued existence of the CRLF and the OTB. The conclusion was based on the following:

The proposed Project will not jeopardize the CRLF because it would occur in a small percentage of its range and only impact marginal upland dispersal habitat. Breeding and feeding areas would not be affected.

The proposed Project will not jeopardize the OTB because Inclusion Area D is not currently occupied by OTB. The proposed Project will provide a net benefit to the OTB because occupied habitat will be preserved in perpetuity and managed for the benefit of the species.

5. Other measures, required by the Director of the Service as necessary or appropriate for purposes of the EA/HCP, will be met.

The Service will condition the Permit to require annual reporting. The UCSC Ranch View Terrace HCP incorporates all other elements determined by the Service to be necessary for approval of the HCP and issuance of the Permit.

6. The Service has received the necessary assurances that the EA/HCP will be implemented.

Signing of the IA by the UC Regents and the potential for the Service to revoke the Permit will help to assure that the HCP will be implemented.

V. GENERAL CRITERIA AND DISQUALIFYING FACTORS - ANALYSIS AND FINDINGS

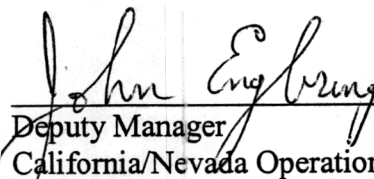
The Service has no evidence that the permit application should be denied on the basis of the criteria and conditions set forth in 50 CFR 13.21(b)-(c).

VI. RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the proposed action, I recommend approval of the issuance of permit number TE089916-0 to the UC Regents for the incidental taking of the CRLF and the OTB in accordance with the UCSC Ranch View Terrace HCP and its supporting Implementing Agreement, to the extent that their take will be a violation of the Act.

10-27-05

Date

 John Engbring
Deputy Manager
California/Nevada Operations Office

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